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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	18-595-1-1
First Inventor	Dale A. Davison
Title	GRADIENT DENSITY METHOD AND APPARATUS
Express Mail Label No.	EL 872136645 US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages 18]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4.  Drawing(s) (35 U.S.C. 113) [Total Sheets 6]
5. Oath or Declaration [Total Sheets 3]
  - a.  Newly executed (original or copy)
  - b.  Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
    - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6.  Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a.  Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i.  CD-ROM or CD-R (2 copies); or
    - ii.  Paper
- c.  Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9.  Assignment Papers (cover sheet & document(s))
10.  37 CFR 3.73(b) Statement  Power of (when there is an assignee)  Attorney
11.  English Translation Document (if applicable)
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15.  Certified Copy of Priority Document(s) (if foreign priority is claimed)
16.  Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17.  Other. Certificates of Express Mail dated November 4, 2003

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

Continuation       Divisional       Continuation-in-part (CIP)      of prior application No.: .....

Prior application information: Examiner \_\_\_\_\_ Art Unit: \_\_\_\_\_  
For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

Customer Number: 000023898      OR       Correspondence address below

Name	Vincent L. Carney		
Address	P.O. Box 80836		
City	Lincoln	State	NE
Country	U.S.A.	Telephone	(402) 465-8808
Zip Code	68501-0836		
Fax	(402) 465-8810		

Name (Print/Type)	Vincent L. Carney	Registration No. (Attorney/Agent)	20,688
Signature	Vincent L. Carney	Date	11/04/2003

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

22241 U.S. PTO  
10/700932

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# FEE TRANSMITTAL

## for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** **(\$)** 554.00

**Complete if Known**

Application Number

Filing Date

First Named Inventor **Dale A. Davison**

Examiner Name

Art Unit

Attorney Docket No. **18-595-1-1****METHOD OF PAYMENT (check all that apply)**

Check  Credit card  Money Order  Other  None

 Deposit Account:Deposit Account Number  
Deposit Account Name**03-0778****Vincent L. Carney**

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee			<b>385</b>
1002 340	2002 170	Design filing fee			
1003 530	2003 265	Plant filing fee			
1004 770	2004 385	Reissue filing fee			
1005 160	2005 80	Provisional filing fee			
<b>SUBTOTAL (1)</b>		<b>(\$)</b> 385.00			

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
20	-20** = 0	x 9	= 0
Independent Claims 6	- 3** = 3	x 43	= 129
Multiple Dependent			

Large Entity	Small Entity	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
<b>SUBTOTAL (2)</b>		<b>(\$)</b> 129.00

\*\*or number previously paid, if greater; For Reissues, see above

**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	<b>40</b>
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify)			
*Reduced by Basic Filing Fee Paid			<b>SUBTOTAL (3) (\$)</b> 40.00

**SUBMITTED BY**

(Complete if applicable)

Name (Print/Type)	<b>Vincent L. Carney</b>	Registration No. (Attorney/Agent)	20,688	Telephone	(402) 465-8808
Signature	<i>Vincent L. Carney</i>			Date	11/04/2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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16638 U.S.PTO  
110403

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dale A. Davison ) Patent Application  
Phillip B. Liescheski )  
 )  
Serial No: ) Express Mailing Label:  
 ) EL 872136645 US  
 )  
Filed : )  
 )  
For : GRADIENT DENSITY ) Date: November 4, 2003  
METHOD AND APPARATUS )

CERTIFICATE OF EXPRESS MAIL

I hereby certify that the documents listed below are being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450:

1. A letter dated November 4, 2003;
2. A Utility Patent Application transmittal form dated November 4, 2003;
3. A Fee Transmittal Form dated November 4, 2003 (2 copies);
4. An Application Data Sheet;
5. A patent application entitled GRADIENT DENSITY METHOD AND APPARATUS, by inventors Dale A. Davison and Phillip B. Liescheski;
6. Informal Drawings (6 sheets);
7. A declaration and power of attorney;
8. An assignment of the invention to Isco, Inc.;



16638 U.S.PTO  
110403

EXPRESS MAIL

November 4, 2003

**VINCENT L. CARNEY**

ATTORNEY AT LAW  
PATENTS AND TRADEMARKS  
P.O. BOX 80836  
LINCOLN, NEBRASKA 68501-0836  
TELEPHONE (402) 465-8808  
FACSIMILE (402) 465-8810

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed herewith are the following:

1. A letter dated November 4, 2003;
2. A Utility Patent Application transmittal form dated November 4, 2003;
3. A Fee Transmittal Form dated November 4, 2003 (2 copies);
4. An Application Data Sheet;
5. A patent application entitled GRADIENT DENSITY METHOD AND APPARATUS, by inventors Dale A. Davison and Phillip B. Liescheski;
6. Informal Drawings (6 sheets);
7. A declaration and power of attorney;
8. An assignment of the invention to Isco, Inc.;
9. Two checks for \$ 514.00 and 40.00; and
10. A postcard receipt.

The Commissioner is hereby authorized to charge fees which may be required or credit any overpayment to Deposit Account No. 03-0778.

Very truly yours,

*Vincent L. Carney*  
Vincent L. Carney

VLC:ktd

Enclosures

9. Two checks for \$ 514.00 and 40.00; and
10. A postcard receipt.

Kathleen T. Dowding

Person Mailing

Vincent L. Carney

Vincent L. Carney  
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--Our Ref: 18-595-1-1